

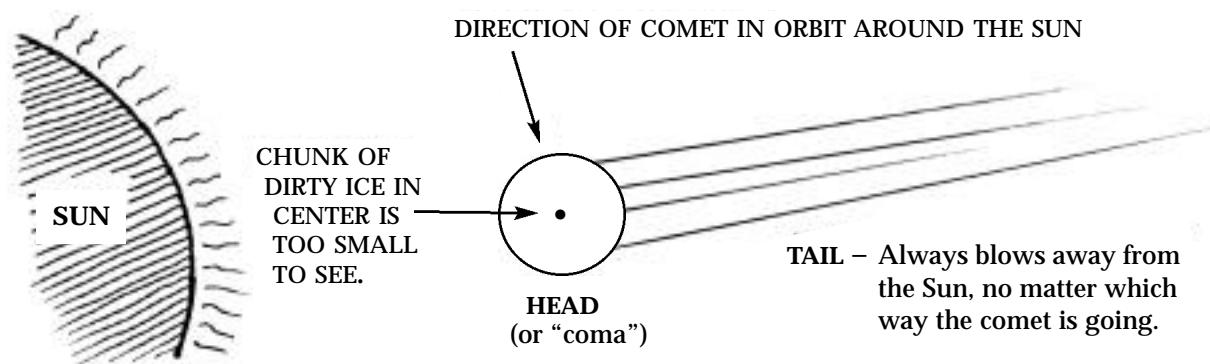
Comets & shooting stars

To discuss ...

- What's the difference between a comet and a shooting star..?
 - Shooting stars:
 - Tiny meteors, maybe the size of a pea.
 - Hit the Earth's atmosphere and burn up quickly, making a long streak across the sky.
 - Comets:
 - Big chunks of dirty ice that can be 10 miles across.
 - Turn into sprinklers full of exploding gas and dust when they get close to the Sun, and the ice begins to vaporize.
 - Like a "ghost," because the object we see in the night sky is not a solid object. It's a huge cloud of gas and dust. The gassy "head" of the comet can be 20 times bigger than the Earth. And the "tail" can be millions of miles long.
 - Tail always blows away from the Sun, no matter which way the comet's going. Tail can blow to back, side, or in front of the comet..!)
(There's no ordinary wind to blow the comet's tail behind it because there's no air in space. The solar wind blows the tail.)

To do ...

- Draw a simple picture on the blackboard that shows the parts of a comet.



Additional discussion topics not covered by the video (time permitting).

- Where do shooting stars come from..?
 - Almost all of them are little pieces of a comet's tail that got left behind.
(A few others are general space dust.)
- Where do comets come from..?
 - When our solar system was formed, not all of the material took shape as planets. Scientists believe comets are frozen "leftovers" – dirty snowballs that contain original materials from the formation of the solar system.
(Something like a comet, or an asteroid, may have killed the dinosaurs. But it's nice to know that most comets stay far away, and scientists see nothing heading our way.)